SKETCHUP-UR-SPACE

LANDSCAPE DESIGNING SOFTWARE – A BETTER VISUALIZATION OF YOUR DESIGN

HAPPY NEW YEAR 2018

MERRY CHRISTMAS

COVER STORY

December 2017

Editor:
Simul Chowdhury

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- Always Use Proxy Components in SketchUp for Faster Rendering
- The boundary of architectural visualization at Gensler
- The Material Dialog Box in SketchUp

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- SketchUp Weekend Workshop
- Developing a table in SketchUp
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SKETCHUP-UR-SPACE
the first ever SketchUp magazine

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A letter direct from the editor desk highlighting on December'17 edition

It's December, the month of snowfall, cold, celebration, Christmas and the waiting for New Year all are in one and so this is the most favorite month of everyone. The whole team of SketchUp-Ur-Space wishes all the readers "Merry Christmas" and advance "Happy New Year".

Our Magazine, SketchUp-Ur-Space never delays to deliver the latest news, tips and many more unique things about SketchUp for our valuable readers and our December Edition has come with some new hacks again. It has some trendy and exciting news for our eagerly waiting readers.

SketchUp-Ur-Space is a well known and lovable magazine that consists with some useful news and data for the beginner and experienced SketchUp users, designers, architects etc. Our magazine's editorial team always wants to give our readers new and interesting stories, news, blogs and many more other things to enhance the knowledge and skills. This December edition has come up with the same motto and various unknown surprising facts on 3D designing that will surely amaze you.

At first, the cover story of our magazine will introduce you with new designing software for Landscape design that will give you a new visual image of the model. Many expert designers, architects or engineers focus on the landscape designing that makes the design better than before.

After that the Article page will appear which has 4 different posts written by the editorial team that depicts about using components and a close look about some different tools and plugins in SketchUp. The first article is about using proxy components in designs that will do the rendering work faster than before. The second one is a close view of the works of Gensler; it is a global planning and designing firm that has made some wonderful creations. The third one describes the importance of Material Dialog Box in SketchUp and the last one has given some tips of creating PNG trees in SketchUp. That means all of them consists of various new sides of SketchUp tools that will open a new side of designing.

The blog section this time comes with new design hacks and tricks in three different blogs; they will show the creation of some new designs and the way to make them better. The first one is about "Developing a table in SketchUp" and some details about designer Tim Killen's e-Book. Second one will describe the importance of "Wall thickness" in designs and the way to do that; and the last one is about a new thinking about making new kind of cities.

But it is true that some tips or tricks needed to make the models or designs far better or perfect and the Tips and Tricks section of our magazine exactly the helping partner for you. This December edition has some unique but simple tool hacks for readers and SketchUp users such as accurate the SketchUp shadows, a new design method from truss, using Tape Measure Tool and some tips of drawing in SketchUp.

Last but not the least, the news section has come with some new creations for Christmas and some new creations, this section has four news. The first one is about "Angular Dimension in SketchUp", the second one is the creation of Fred Bartles. Third one is about making new things to design Christmas tree and the last one is about the method creating the measuring lines perfectly.

Too much there for our readers, hope this edition also pleasures you as the previous ones, so enjoy your holiday with our December edition.

So it seems that this edition has published very effective sides of SketchUp and gives some new and interesting news also. Hope readers will enjoy this edition and discover some new side of 3D design.

If you have any queries concerning publication, subscription, troubles navigating the site, please mail us at subhra@jobs2india.com

Best wishes
Subhra Bera
Editor

Interview with Mauritz Snyman who is a specialist in 3D architectural modeling, 3D renderings, 3D visualization and 3D animations

Interviewer: Simul Chowdhury (Editor)

Introduce yourself to our readers.

Hi all. Thank you for the opportunity Simul. I'm Mauritz Snyman & the owner of Jireh3D, a company I started in 2008 focusing on 3D Architectural Modeling & Rendering. I'm based in South-Africa.

I love what I do. Only a couple of things get me away from my computer - one being fishing.

How did you start your career as a 3D modeler?

I studied Interior Design but never pursued that. Not long after, I moved to the UK and started out as a CAD technician in London. But did not find it creative enough, so I started online 3D modeling training after hours. My boss at the time created a position for me but unfortunately during the 2008 recession more than half the company were made redundant. And so my own company, Jireh3D was born.

What kind of hardware do you use?

At the moment - Apple Mac 8 core, 2.1 Ghz, 64 GIG ram & 2 x 24" Screens to make life easier.

Then some other machines which are a lot smaller, but just a backup for rendering

Can you tell us about the software you use in the studio?

Sure. I use Sketch-up for all the basic modeling, then Cinema4D to add detail & rendering in VRay or Corona. Adobe Photoshop for the finishing touches.

Can you define the balance between Pure Render and Post Production in your work?

Post production is great, but i like getting renders in such a state that there is little Photoshop work involved in the end. It depends on the artist really.

I always use Photoshop to do final touches, but never to create the full image itself because clients change their minds very quickly & not many people wants to re-do everything again.

Can you tell us something about your firm?

My firm is running for about 9 years now. Jireh3D specializes in 3D architectural modelling, 3D renderings, 3D visualisation and 3D animations. We bring 2D plans to life in beautiful photo-realistic, 3D images. We create 3D models from CAD plans, sketches or simply ideas, supplied by the client. We are able to produce interior and exterior views of the proposed development. We can also create fly-through animations.

Tell us about your work with 3D architectural modeling.

For us, the modeling part is very important. If the modeling is bad, the renders will be bad. So adding detail is of great importance, as that is what helps create realism.

After modeling, texturing is just as important.

Sketch-up is great for modeling things very fast, and if the client changes his design, it can be changed very quickly unlike most programs.

Did you face any problems or technical issues along the project, and how did you solve them?

50% of the time we run into problems during projects. Most of the time it's a machine that can crash because the scene is so poly heavy...Solving that was to upgrade memory & to use a render farm as our backup.

Another problem is getting paid. What i have learned over the years, is to work with a contract & 50% upfront payment. I lost a lot of money because clients ran away, so very important to get a contract & proper payment terms in place.

What was the most challenging project you've worked for, so far?

The one I'm working on currently. Very big & difficult to work with because the model is so poly-heavy. It's for a few exterior renders, but the surroundings has tons of foliage which makes the process very slow and quite frustrating.

What's the hardest thing about being a professional 3D designer?

Not getting paid enough for hard work and long hours. It's our bread and butter & lots of people take artists for granted.

Where is architectural visualization heading next?

Not sure, but because of the incredible technology, we are going forward really fast and it is difficult to keep up to date to the latest programs & plugins in the industry.

What suggestions do you want to provide for newbie 3D modelers?

If you want to do this full time, make sure you do it in excellence. Always give your best and be teachable so there will always be room for improvement.

How do you evaluate our magazine?

Very good. Lots of 3D Artists can learn from this & tons of info are available for anyone with many tips & tricks.

www.behance.net/Jireh3D

Landscape designing software – a Better Visualization of Your Design

Simul Chowdhury: Editor

Landscape planning is a most needed step, especially for a new home. Expert designers carve out the best plan for a landscape after analyzing the views, activities and environments of the location. Traditionally, the plan is designed with pencil and paper that is not only time-taking but also ineffective for redrawing. Though it is considered to be the organic way of a design, today's designers are looking for easy alternatives.

Professional landscape designing software applications are designed by companies to help designers add details as perfectly as they visualize.

Landscape designs on paper are more like an artistic job where designers consider and measure each detail very carefully. The downfall of such designs is nothing but a lack of efficiency. Redrawing of the designs is time-consuming, and getting a proper visualization is also very difficult.

3D landscape design software applications are growing in numbers with time. The useful applications and tools carry everything that is needed to make a proper plan for your landscape. Google SketchUp proves to be handy as it allows even beginners to design like an expert.

Drawing landscape on paper does not communicate well with the clients. The plans even fail to cut the mark due to the lack of clarity. This is why landscape designing software applications outrun the former one and make a strong place in the designing tool of the planners.

These software applications are also not free from shortfalls. Students and designers who are confident on designing in a conventional way feel uncomfortable with these tools. They need to go through an extensive training program to learn the application first before drawing a design using the tools. The applications are costly and they require a timely update.

The above-mentioned problems of 3d landscape design software are minor ones that can easily be eliminated. The benefits of these applications are countless and they bring the profit-driven result also. A better communication with the clients is established by the software application.

Advantages make you convinced that professional landscape design software application is a necessary tool for the designers. You can develop a master plan with colors and details that add a real look to your model. Editing any part of your design is not worrisome; rather it is an easily executed work by the designers.

Creating perspective photo through pencil is a hard and time-consuming job, and the end result is also not as clean as the design done by software application. You can prepare a virtual photo of your design with all meaningful aspects. Trees, flowers, sidewalks and other necessary details of landscape design are preloaded in the software application so that you can drop them in your design as per you like.

Generally, 3D designs software tools like SketchUp come up with all important things required for designing a landscape. Companies, though, go further and create applications specially designed for sketching landscape digitally. 3D images and designs take clients to the virtual landscape and give them a real-time thrill to walk through the design.

Article Source: postandcourier.com

Always Use Proxy Components in SketchUp for Faster Rendering

Simul Chowdhury: Editor

Rendering is always a time-taking task, no matter what application you use. SketchUp offers some easiest solutions that not only make your design better than others but also speed up your modeling process. Proxy components are such time-saver feature that allows you to work faster on your model and get a picture realistic rendering.

Proxy component, in SketchUp term, is used to replace objects with high-poly counts so that you can avoid the delay to complete the rendering. Saving time in rendering will let you focus on other designing detail of your SketchUp.

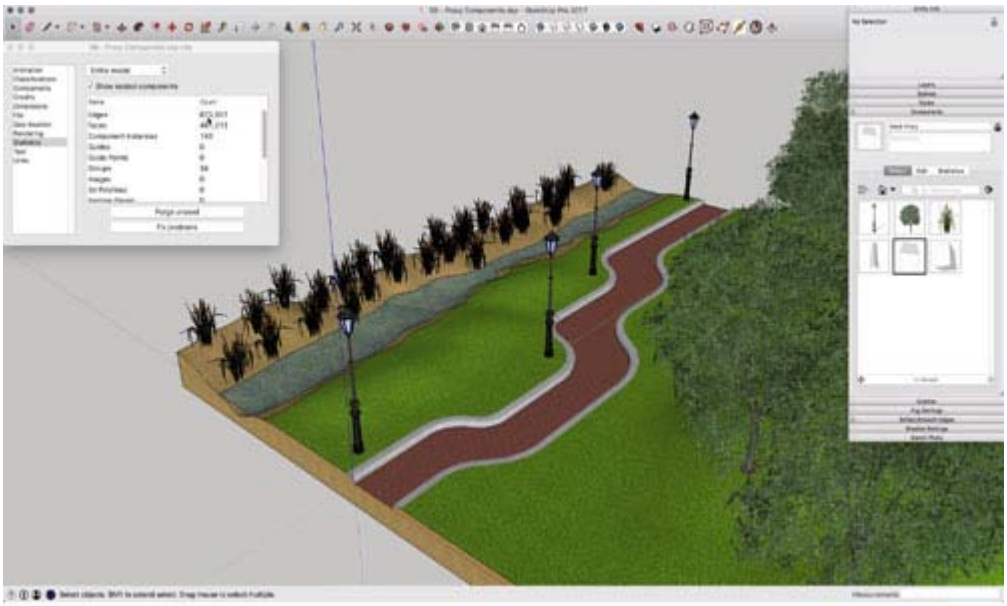
You can use both low-poly and high-poly count in Proxy component as per your requirement. Creating models and setting their views will preferably be done with the low poly version. The high-poly count is used for the rendering that maintains the quality of the picture. Current components of your model get the required replacement with this feature. You can use the same name for replacing your current component with low poly and high poly geometry. You can also create a new component with a different name that has high-poly layer in the original form and low poly geometry in low poly layer.

How to create a Proxy component: Creating a proxy component follows simple steps. Right a click on the component you want to replace and choose Create Lo-Poly Proxy Component from RP Tools submenu. You need to select the options you want for your model and click 'OK'.

After clicking Create Lo-Poly Proxy Component option, you will get a dialogue box containing all essential details that you need to choose.

These are:

- Replace existing component
- Create component with new name
- Criss-cross images
- Wireframe Bock



Criss-cross proxy object can be restored to the previous position with choosing restore component from Lo-Poly proxy.

Terms that you need to know:

- Criss-cross images – As the name says, your model will appear in crisss-cross look for thumbnail image.
- Block with images – it blocks the images of the original component.
- Wire Frame Block – wire frame blocks will replace the components you select.

Layers after conversion:

• Low-Poly On – component with low poly geometry will be displayed.
• Hi-Poly On – the original component and geometry will be displayed.
• Both on – both layers are turned on in your model.

Proxy components solve the most complex problem while designing on SketchUp. Rendering always takes times and it slows the system. With this feature, you can easily avoid the issue and make your rendering better and faster.

Here is also a link of a video tutorial that will guide you on how you can create proxy components.

https://youtu.be/2VZj-odqx68

The boundary of architectural visualization at Gensler

Subhra Bera: Editor

It is literary a global architecture, design and planning firm that has near about 44 branches and more than 5000 professionals and spread their network across Asia, Europe, Australia and the Middle East. The firm was founded by Mr. Arthur Gensler Jr. and Associates Inc., known as Gensler in 1965 at San Francisco and in recent they are been serving more than 3500 active clients in every industry. Gensler designers are aimed to renovate the places more inspiring, more consistent and more influenced where people live, work and play. Gensler is planned for supporting their clients all over the world at every step of design cycle from primary strategy and design planning through performance and management.

In this article we will come to know about the creative works and system and management about architectural visualization of Gensler from Scott DeWoody who is the creative media manager at Gensler and has the experience to work with countless clients such as NVIDIA Corporation, ExxonMobil, Shell Oil Company, BP, City Center Las Vegas and many more.

Scott's Role at Gensler: As a creative media manager Scott has to manage the rendering workflows, supervise visualization technologies, give training to the newcomers, and work on documentation over several things and research and development into new technologies like VR/AR/MR etc. Lot of roles really for him, but this is not the last as he as to act as a consultant on a huge number of projects and find out the best solution for any problem that can appear.

As per the words of Scott, he and other employees can get really big possibilities of working with various kinds of clients and projects that provide them enough experience for being compatible in every field. Scott has been working in Gensler for 10 years and serving various kinds of clients everyday which give him lot of experience and knowledge and he enjoys his work a lot.

Design tools: As Gensler is an architectural, designing and planning firm so the employers have to work with various tools that can make their work better in the less time. Scott says that they use the tools like SketchUp, Rhino, and Revit and for a degree use 3ds Max, along this there main visualization tool is V-Ray. The detailed works are done using the Unity and Unreal gaming tools and create some mutual visualization. Without this I Ray and other apps are used and Deadline tool is used to produce a global render in the network resources.

Process of producing powerful and pleasing imagery: Though producing imagery is different for different project and different designers use different tools but in general V-Ray is used by all in every design as a baseline. This tool has been using by the designers from a long decade and with the newest versions they can create render while continuously working in a project without stopping anywhere. V-Ray is enough submissive for the artist to work on taking things in conceptual or diagrammatical way or working in the photo-realistic method to get a new view on rendering quality. The latest attempt they scaled into the designs is the materials with using a system named 'Avail'. This is especially designed for the AEC industry and has over 1500 V-Ray materials and a shared library for the designers. Other Software named Substance Designer which is a mechanical material builder is used to make any kind of virtual thing like carpet, wood, stone or anything to give a real look. The whole library is connected with all the offices across the world where everyone uses the same palette to get their first renderings off the ground.

A 'standard workflow': A standard workflow means an upgraded and useful workflow that is common in every field and every office of Gensler; it is the SketchUp and Microsoft. SketchUp help to dive in and mass out their ideas quickly to a downloadable textures and speed up the work, on the other hand the retailer dept. use SketchUp with Microsoft to present their design in the app on-the-fly. After that they use a mixture of Fuzor and Enscape to utilize a real-time rendering, besides these they use 3ds Max Interactive, Revit etc. also. For the game engine they have different level of thinking, all the designers want to make the gaming engines quick for modeling and want different outputs and recently working on it.

Collaboration: Scott has a goal to make a firm platform of rendering across the board so for rendering he uses V-Ray's upgrading version for all platforms. V-Ray gives him a firm platform for every design and solving problems, using materials or adding extra features.

Future of design visualization: Real-time rendering is becoming popular and accessible for all and people are crazy for it but in the other hand the ray-tracing is also gaining attentions. Though they are two separate worlds, but Scott has a gut feeling that in future they can make a combination that will change the future of design visualization.

Scott's experience with Mixed Reality: Scott had some very good experience while working in this project as they worked with SketchUp viewer for HoloLens and experienced many things about proofing of concept, drooping the custom designed bridge etc. in the real-world environment etc.

The team is recently working on various projects and looking forward to enhance the IoT experience in designing and hoping to take the technology to the next level. Gensel is extremely happy with their employees and convinced also that tools like SketchUp, Rhino, and VR are helping them a lot to grab something big in future.

Article Source: blog.sketchup.com

The Material Dialog Box in SketchUp

Simul Chowdhury: Editor

SketchUp has tools and plugins that add a touch of reality to the design. The presentation of SketchUp distinguishes the application from others as it successfully brings the reality of 3D design to you. The material box, as the name defines, gives color effects to the design. Material dialog box appears differently in the windows and Mac versions.

To open the material dialog box: Windows > materials

Generally, two types of materials (colors and textures) are available in the SketchUp dialog box and you can apply either one as per your need.

Colors:

Solid colors are available in the dialog box and you cannot use the gradients. You can make the color of your choice.

Textures:

Texture in SketchUp is a small image that is applied to the face of your design until the face gets completely covered by the image. For example, if you want to design a brick face, you need to click the brick icon image several times to fill up the surface. There are many textures available in SketchUp, and they indeed add an interesting touch to the design. If the already existed list seems not enough, you can download more from Google SketchUp website. You can also download paid textures and can make your own format.

More about SketchUp materials:

• You can make the materials translucent by adjusting the opacity slider. This adds a clear visibility to your model in the Windows.
• Textures have transparent areas also that allow you to see through the faces you are texturing on. The black spaces on the texture may look inappropriate, but they come up with a wide range of benefits.
• You can also edit a material as per your choice. This is basically the work of the advanced designers and they know how to handle the materials properly to make a perfect 3D model.

• Photo texturing is another thing that will help you get the model as per your expectation. You can apply photos instead of colors and textures to cover the surfaces of your design. This feature brings in a new change in the work flow and pushes the limits. Those building models for Google earth will take benefits from this feature.

These are the few things about dialog box that make your designer easier and simpler. This feature gives your 3D design a complete sense.

PNG Trees in 3D Warehouse

Subhra Bera: Editor

SketchUp is one of the most used software for 3D modeling and design tools across the world and SketchUp team works with a motto that is “SketchUp for everyone”. From their beginning they are continuously working to give their users better, smarter and successful experience to work with SketchUp and they have published so many tools that will be useful for designing and modeling. As a result of their constant improvement now-a-days it has been using by hundreds of thousands of architects, engineers, contractors, woodworkers, artists and other people from different various fields. They are working on SketchUp Pro, LayOut, Extension Warehouse and the 3D Warehouse for designing each and every little object from motion centers to tree houses and many more.

About SketchUp 3D Warehouse: The SketchUp 3D Warehouse is a wonderful part of SketchUp and popular among the SketchUp users where anyone can find various 3D models. It is generally an open source library where SketchUp users can work on models, upload it there and also download various uploaded models for sharing with clients, teammates etc. The models can be easily downloaded into any program without saving in the computer, the file sizes of the models should be up to 50 MB and these models can also make, change and upload in the 3D Warehouse without any charge.

The models with the help of 3D Warehouse look lively and users can get various pre made objects here that can be easily applicable in any model like plants, trees, people, sun, moon, building etc. Here the modeling of PNG Trees is described with a scene of a beautiful cottage.

Verkley Design and Modeling has created a wonderful model of a lovely small cottage in the woods with full of trees and uploaded it in the 3D Warehouse. Users can download this model by clicking on the logo of the 3D warehouse or can use it in any other model having the same features. In the model, the trees can easily grab anyone’s attention as they are so well designed and furnished. The structures are made with simple group and components, except that they use photo painting than just modeling the individual leaf. These trees are more efficient and helpful to design any model rather than the original and large 3D trees.

To see the painted faces navigate around the model on the slower machines and using Monochrome view individual painted faces will appear that can help to understand the original technique of modeling the trees. For the big trees with the texture of lot of leaves they used the Shaded tool with Texture view and used a lot of painted faces at every angle with a transparent background.

Besides this model, there are lots of different tree models are also available at the 3D Warehouse library that can apply in the models. In case anyone want to use little trees, plants or shrubs to reduce the file size they can try some Face-Camera trees from the 3D Warehouse. In the place of PNG trees there are some other model trees can be a replacement of it that will give the model same look; such as Alpha Tree or Transparent Tree which are single, flat and printed faces.

Face-Camera Component: In the above part we have seen that the tree models can be made in Face-Camera tool rather than downloading the created models. The Verkley Design and Modeling team has worked with the tool in another model to make some trees; at first they take a model tree with a transparent background. Users can find the tree background from Google Images go there and search for “alpha transparent tree”.

Now choose one from the list of the trees; just right click on the required tree and choose one of the saving options and save it in the PNG format. After choosing team go back to SketchUp again and chose the File/Import option and imported as an

image from the PNG files. Then they just clicked on the two corners for bringing the image as per size and worked from the front view and then orbit the image for furnished ending.

It is not the end, there were some fixes that need to done correctly, the tree has to make with groups and components. Users can do it easily by click the right button of the mouse to explode it and then it will become a component by selecting the image and edges. Next the axes box has to check to complete the component and it is very important for face-camera to work as the red axis menu has to go with the image and the blue one has to go up.

Also check the Face Camera box to complete the process and click on the Create menu to finish the works.

Article Source: danieltal.com

SketchUp Weekend Workshop

Simul Chowdhury: Editor

SketchUp has probably been the widely used 3D designing and modeling application. People across the world use SketchUp to meet their designing needs in a satisfying way. The reason behind the surprising growth of the application is its user-friendly tools and features that embrace everyone having a designing spree. To offer a better communication between experts and learners, SketchUp workshop has been organized every year where important tools and effective tactics are discussed to bring the inside out of this application.

This weekend SketchUp workshop is planned with the Corvus Design, an architectural studio in Collooney, where participants will understand how to develop skills to have a better communication with their project. The courses are planned in a systematic way that helps designers learn step by step every detail of the project. Though there are no eligibility criteria, basic computer skill is preferable.

The workshop is complete based on to introduce you with the basics of SketchUp and how can develop project prototype quickly and effortlessly. Different 3D angles and floor plans will be discussed there where participants can intensely observe designing procedure. As believed conventionally, 3D modeling interprets your designing plan better and clear than other applications available. You can observe every step of designing in real time that makes the installation and layout of your project easier.

Artists will get a thorough understanding of virtual 3D exhibition space that translates their 2D pans and sketches into three dimensions model. The courses involve the basics of SketchUp and their applications for 3D modeling on 2D plans.

Course details are given below:

Day 1

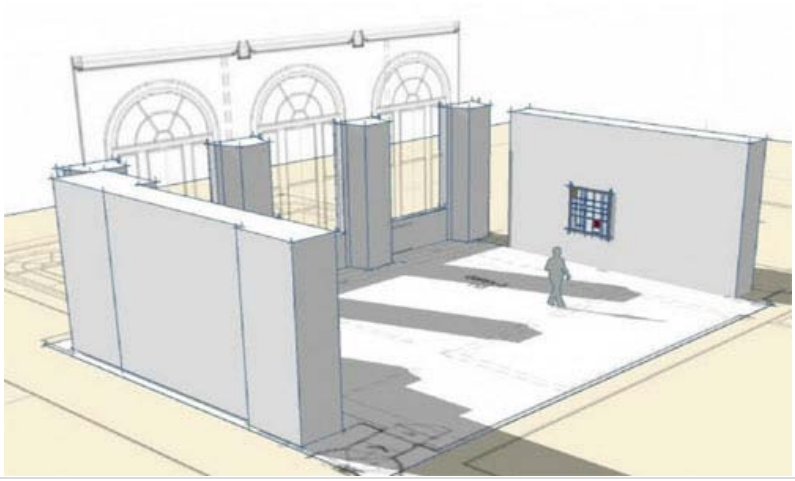
1. Basic Modelling Tools and Functions
2. Orbit, Pan and Zoom etc.
3. Move, Copy, Rotate, Offset
4. Groups, Components and Extrusions
5. Practice

Day 2

6. Simple Materials
7. Lighting and importing photographs
8. Setting Scenes and views
9. Saving, exporting and printing
10. Practice

The workshop is solely organized for those students who want to get an expert guidance to hone their skills in the 3D world. Since its demand is growing with time, it is definitely a profitable sector for the young generation.

Article Source: thedock.ie



Developing a table in SketchUp

Subhra Bera: Editor

Tim Killen has wrote a wonderful eBook on woodworking and the in every chapter of the book there is a modeling detail of a piece of furniture like table, window, door etc. The book is named as “SketchUp Guide for Woodworkers” and the details are described there with tutorial videos and descriptions.

In the ninth chapter of the eBook, Tim has described the process of creating a nice Chamfered Post Table; it is a 1700 model and is one of the famous pieces made by Wallace Nutting in his Book “Furniture Treasury”. Tim has named the chapter nine “How to Begin and Develop a piece of Furniture” in SketchUp which is a very good sample to start and grow the original woodworking used in workshops.

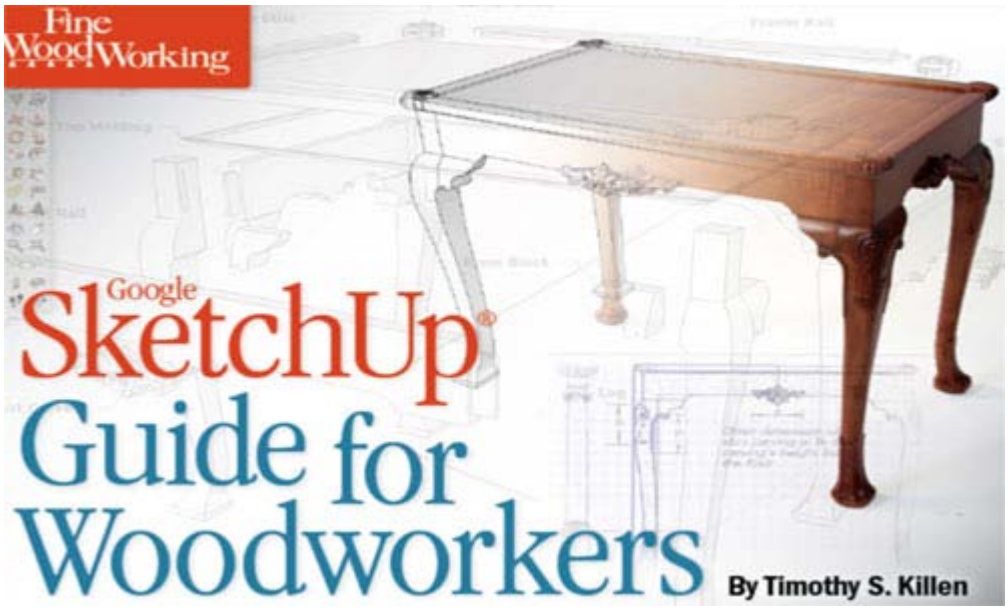
Using SketchUp for modeling is actually a good idea as it will give a furnished draft of the original model which will be followed in time of original working in workshop.

Tim’s eBook is full of detailed and understandable steps with many still pictures, texts and tutorial videos. In his ninth chapter he started making the Table from developing and sketching the main structures like legs, stretches, sides and backside etc. and all the four edges of the legs are unique here called chamfers. These unique chamfers are closed with a flat triangular finish which gives the legs a mix look of old and classic with uniqueness.

https://youtu.be/-WoUlea-dZ4

In real without perfect planning or sketching, making these chamfers is not an easy job but in SketchUp, chamfers are started to making from one leg component and at last it ends by making all the four sharp and designed legs. Tim used various tools in SketchUp to give the chamfers their perfect look.

Article Source: finewoodworking.com



Wall Thickness for 3D Printing

Simul Chowdhury: Editor

Wall thickness is necessary when you give your 3D model in print; otherwise, the 3D printer may not understand the thickness and thinness of the walls of your designs and print your model wrongly. So, it is the unwritten rule of designing 3D model in SketchUp to add wall thickness to your design. Paper-thin surfaces are strictly avoided for 3D printable models.

Setting the correct wall thickness needs your knowledge and proficient skills in designing. 3D printing materials and 3D models are two different subjects. The right wall thickness makes your 3D model print flawless, and it appears the same as you expect.

Choose the perfect wall for your 3D printing:

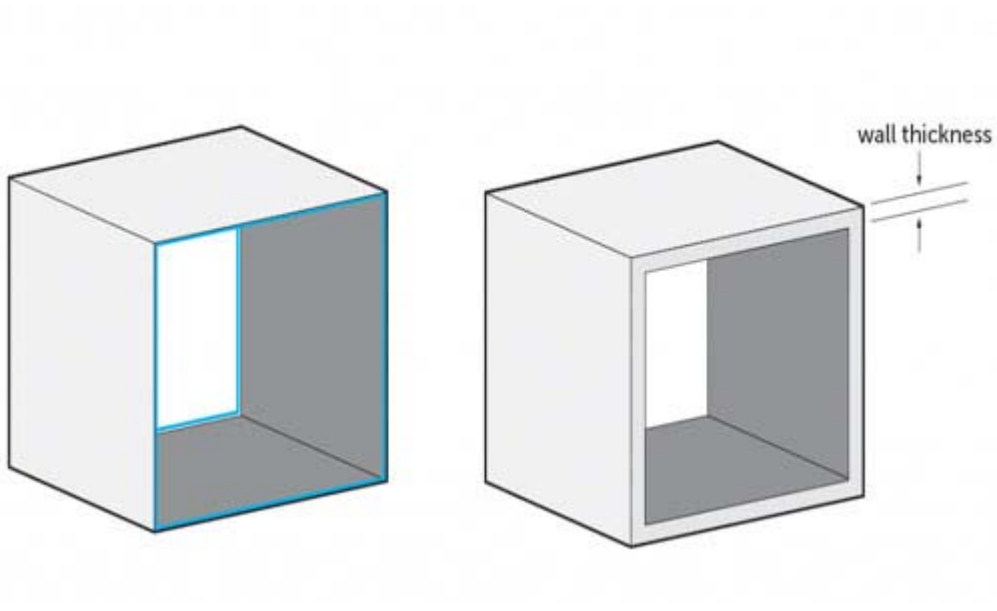
3D designing is an interesting field that grows rapidly in the world. This has made the craze for 3d printing materials used for various purposes. So, it is necessary to learn how to print a 3D model properly the way the design shows. In the designing software, you no need to work on the thickness surfaces to make your model. But when it comes to printing, it is an obligatory thing to add wall thickness. It helps 3D printer understand how thick of the surfaces are and print accordingly.

Wall thickness is defined as the distance between one surface and its opposite sheer surface. There are a few things that have an impact on choosing how much thickness you want for the surfaces. Materials would definitely come first in the list. The other factors that show a direct connection with the design are alignment, size and overall design.

A guide to proper 3D printing with the wall thickness:

Printing materials play definitely an important role, and depending on which, you can opt for the minimum thickness of your wall. It needs a basic knowledge of different printing materials. If your design needs strong materials like high detailed stainless steel or titanium, you can keep your wall thickness indeed thick as the materials allow you to do so.

The other factors are also there to watch on your 3D printing issue. Structure and design of your 3D models can be the decider of the wall thickness of the surfaces. For example, a print of vertical wall with 5mm2 wall surface needs 0.3mm wall thickness while a vertical wall with the 100mm2 wall surface needs 1mm thickness. If you are printing a horizontal wall with 100mm2 areas, then the wall thickness must be of 2mm. To set a proper wall thickness, you have to be correct while setting inputs like the size of the surface, the alignment (horizontal and vertical).



The materials like ceramics which are fragile need different attention from the strong and hard materials. The larger the model is, the stronger the structure must be – this is considered to be the general rule while printing on the comparatively fragile surface. For example, the ceramic model of 50 mm x 50 mm x 50 mm needs a minimum thickness of 3mm. a ceramic object with 100 mm x 100 mm x 100 mm has 6mm thickness for printable.

The other factors attached with 3D printing:

While preparing your model for 3D printing, you have to be very cautious while dealing with each factor of your design. The essential details are given below:

• It is common to give the primary attention on the wall with minimum thinness. But problems arise with the wall of maximum thickness. Thicker parts produce stress more than the thinner ones, resulting in a crack or break in the materials.
• To avert breaks on your print, it is always recommended to have an extra thickness of 5mm wall.

Your every design surface needs a recommended wall thickness to keep your model perfect for printing. It is an extraordinary process where you can visualize your virtual 3D models in real. So, having wall thickness is as much necessary as having a correct designing idea.

Article Source: i.materialise.com

Cube Cities are a unique thinking

Subhra Bera: Editor

Greg Angevine is the founder of Cube Cities and with his innovative team he has made some unique featured cities which are different from the normal thoughts. He has spent a lot of years in his career to find some idea from some of the largest and most elaborately detailed cities all over the world. From his survey over this various kind of cities he has made finally very useful, floor-level visualizations for the three-dimensional industry and it is full of uniqueness. This article will throw the light on Greg's innovative ideas and works.

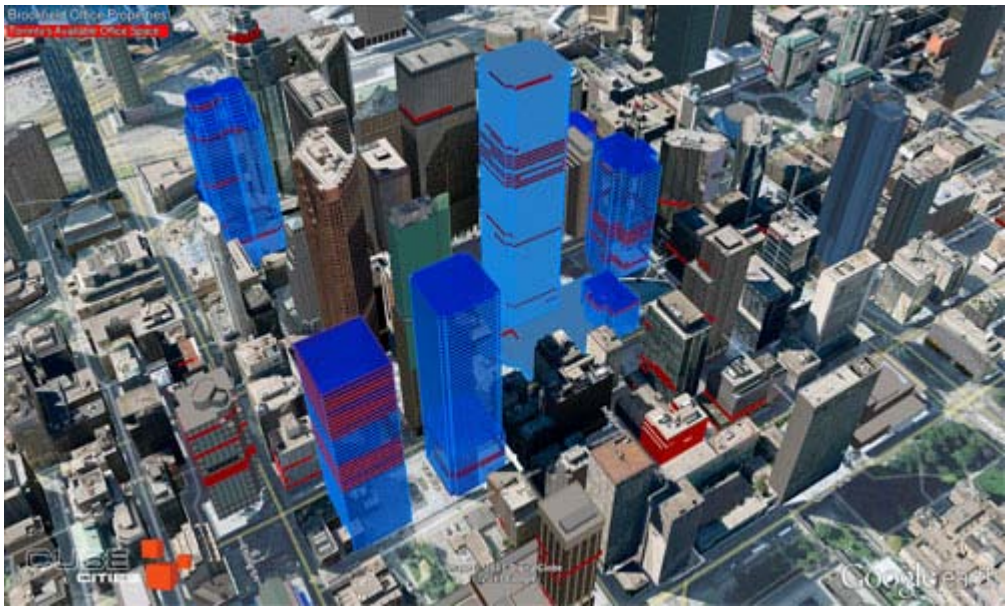
About Cube Cities: It is the name of the company, given by Greg and it was founded in the year 2010 worked on creating and expanding a floor-level imagination platform which is reflects the transparency in the real estate markets. Before the arriving of Cube Cities it was not possible to fast visualize real estate data in 3D and now it became very effective for the real estate organizations. Cube Cities has changed the slow graphic of the real estate market and has brought a huge amount of interest for the common people.

Reason to be in the real estate modeling industry: Though Cube Cities is a full time and evolved company in real estate industry but before it Greg had worked with a commercial real estate agency in a research capacity that gave him the experience. Working with the real estate agency gave him the experience of the sources of firm and maintaining the data, also provided with the information about the techniques by which generally brokers grasp the data of produce researches to make a good communication in trending markets. Everyone is knowledgeable about the nature of the commercial real estate; it is very competitive field and has so much high-quality challenging data, to overthrow this Greg and his team has a build a method. The method can help users to weight their data and offer them different complementary tools to build their own visualizations. This is a new and developed technology that can create thousands of floor-level building models quickly and help to connect with users and become a useful important 3D mapping technology.

3D modeling is best in the real estate modeling industry: Real estate field is all about the location and views that can leave an effect in the construction process and give the project a well and furnished look. As 3D modeling can highlight each and every detail clearly so by using it modelers can highlight the main parts of their model and give the model a lively look.

Most challenging city model: Greg has designed many famous and big cities all around the world but according to him among them the most challenging and interesting model is Manhattan. This city is full of beauty in structures of every building; this city is consisted with various urban developments that give the city so much thickness that can't find any other city. SketchUp has detailed the diversity in the buildings and made the iconic skyscrapers which are better than any procreated process. SketchUp is the only solution to create all kind of new and developed cities all over the world.

Things that SketchUp solves in a city model: SketchUp gives its users the ability to use 3D buildings with perfect geometry and high-quality photographic textures in any application. It is not easy to get the right a3erial imagery for building photorealistic models though it allows using the camera kind of features everywhere. A team of SketchUp modelers maintains a good number of photographers in selected cities which help to create high-quality models in any content.



Other extensions used in Cube Cities with SketchUp: Though SketchUp is an all-rounder tool but Greg is using software named Cesium, a mapping partner of SketchUp that emigrates the SketchUp models into it using SketchUp's glTF export extension. Cesium is used in case of working with many SketchUp models loaded with unique javascript calls and can bear the extra load of 3D Tile Server that improve the loading speed and performance.

Besides this, the Cube Cities' team has also worked with Matterport; this software that helps to see inside a building and tour for examining the original conditions of a space. Matterport also make the Cube Cities technology a perfect way to join floors or windows of a SketchUp model to virtual tour.

Future plans of Cube Cities: According to Greg, Cube Cities can be used to find indoor location or the location where the floor or partial area of a floor or other can be found. Besides that it can identify the problematic area or part of a building and solve them and provide public safety regulations also. In addition it is said that Greg is very much excited to see the combination and coordination of Cube Cities' technology with SketchUp, Cesium and different mobile devices. All of them are different from each other but can become a huge versatile platform for the real estate industry.

Article Source: blog.sketchup.com

How Accurate Are SketchUp Shadows?

Simul Chowdhury: Editor

Shadows add a real essence to your design. The same is true for your 3D modeling also. SketchUp, being the most popular 3D modeling design application, has come up with different shadow effects required for creating the environment as per the sun movement. Now the question is – how accurate are SketchUp shadows? The application follows a general rule and helps you add shadows the way the sun casts naturally. Mimicking the real-world shadow is not easy. But, SketchUp allows you to observe how the real shadow enhances the visibility of an object.

With SketchUp, you can calculate the best angle for adding shadows to your design. Below are a few features that are commonly available in the application.

• The latitude and longitude of a model.
• Cardinal orientation (north, south, east or west) of a model.
• Time zone selection

The shadow feature of SketchUp only brings out the general rule of how the Sun casts a shadow as per the geo-location. Since you cannot adjust time in the application, getting the right show effect is a bit difficult.

To add shadow effects to your design, you must put your model in geo-location. In SketchUp Pro 2017, you can easily import terrain to your design with the Add Location Tool. The steps can be done manually, as well. Follow the steps below:

Window > Model Info > Geo-location > Set Manual Location > Latitude and Longitude

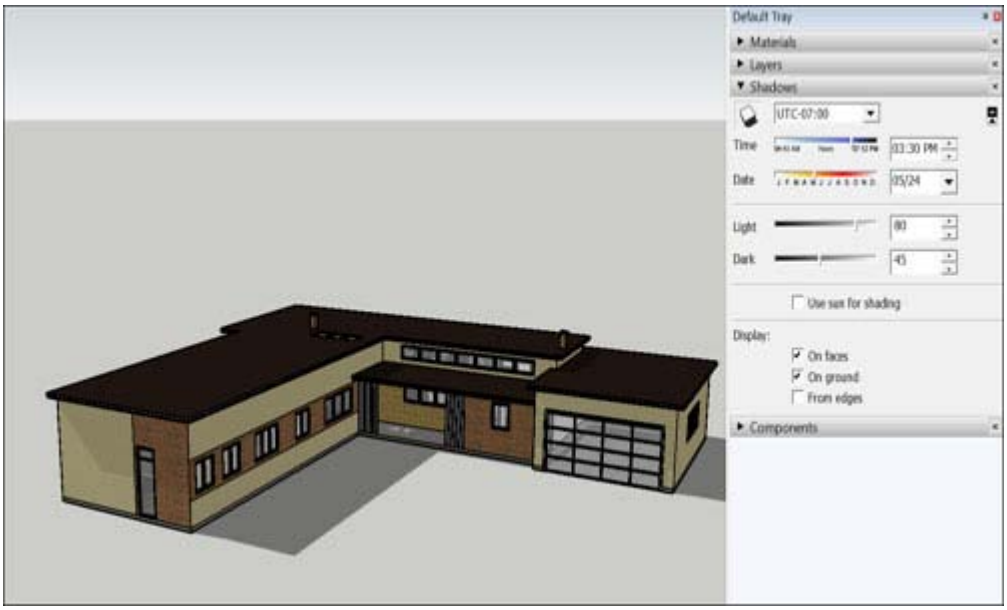
Once you make your model Geo-located, the sun creates shadow naturally on your model. It creates your design more realistic. How to turn on Shadow in SketchUp:

SketchUp turns off shadow feature by default because shadows are consuming more computer processing ability. You can turn on shadow manually by following the steps: View > Shadow

To get a complete control over the tool, open the shadow feature on a default tray and customize everything that is needed. To add the time of the day, you can either drag the time slide along the timeline or insert a time in the time box. Steps will be the same for adding a month and day – dragging the date slide or inserting the date in a date box.

Customize shadow:

Besides the above-mentioned tips, there are a few things that help you customize the shadow attributes the way you want. The tips are given below:



• In the upper left is a display shadow button for switching the shadow effect between on and off.
• The time-zone tab allows you to select a new time zone. If the design is geo-located, the time showing in the model is accurate.
• The light slider is for changing the intensity of the light. This way, you can lighten or darken your model.

• The Dark slider is controlling the intensity of the shadow.
• On Face slider helps you cast the shadow of the one face on the other face logically.

• On Ground slider is for casting a shadow on the plane ground.
• From edges denotes the edges of the face can cast a shadow.

The SketchUp Shadow tool is amazing to use as you can change the effect of shadow as per the movement of the sun. All advanced functions along with the basic ones will help your make your design as much real as required.

Article Source: blog.sketchup.com

Message in a bottle: A search in truss automation

Subhra Bera: Editor

A truss is presented as a framework for designing and construction field like a structure of elements which act as a single component though in combined situation and provide the support for the bigger structures. Naturally the design of an architectural truss is dependent on various calculations counting the effects of physical forces like weight, compression, material limitation etc. and the calculations are till now alarming and time consuming.

Robert Kovacs and his research team at Hasso Plattner Institute has been inventing to find a process of automating those calculations and there search and efforts have ended after creating TrussFab; it is a SketchUp Extension that make the 3D printable truss elements popular for the SketchUp users. This TrussFab helps users for rotating SketchUp geometry into a truss network which can smoothly be put together in real life with the recycled materials. This truss network with the recycled materials provides the users the ability for gathering trusses to their own projects easily, faster and reliably.

About the project: It is a unique project and thinking that has started two years ago at Hasso Plattner Institute and has attracted many undergrad and grad students to work here, the main team consist the following members: Robert Kovacs, Anna Seufert, Ludwig Wall, Hsiang-Ting Chen, Florian Meniel, Willi Muller, Sijing You, Maximilian Brehm, Jonathan Striebel, Yannis Kommana, Alexander Popiak, Thomas Blasius and Patrick Baudish.

Robert and the Truss Fab Team have highlighted some points on their works and they have started working on the plastic bottles and have created so far some amazing projects.

Idea of TrussFab: Robert‘s first project was the Protopiper at the Hasso Platter that focused on prototyping room-sized objects at perfect scale. After that the team has planned to take forward the idea of large-scale personal fiction for more functional objects and the result was complementing small 3D printed parts with ready-made objects that became plastic bottles. They also realized the need of the key design principle is always fro closed triangular contours, trusses or otherwise the connectors or the bottle will break.

The underlying physics of the forces: Truss structures are containing of triangles arrangements; that’s why the structures block deformation than only the individual object. The main strength of trusses is that they turn side forces or bending forces into tension and compression forces with the length of the edges or members.

3D printed hubs in the extension: Robert and the Truss Hub team has rated many hub designs proficient to hold the bottles or any objects together and they also used a threaded-snap connector pair for each edge. After that they settled on a design which can adjust various kind of objects (here bottles) and easily apply the 3D print; initially this design has the connector with only a simple projection.

Incorporating engineering functions into the application: TrussFab and Robert have the main goal to give a chance to the beginner users for building structurally firm large-scale things in just some minutes. The fundamental design principle behind TrussFab is well known in architecture that is less understandable in everyday life and the 3D printers can manufacture more objects with a better quality. The observation of materials and the wall thickness of the designs often fail as the forces grow numerically with the size of the object; it can overcome by implementing truss-specific functions to help users to create sturdy structures. In addition the editor of TussFab offers primary shape fundamentals as the elementary formed trusses, tools that can create large beams in the form of trusses and tools to tweak the shape of structure in the time of maintaining inflexibility.

The most inspiring structure: The largest structure according to Robert and his team was a 5m high pavilion for the CHI’17 conference that was made more than 1500 bottles and 191 3D printed hubs and was designed by the architect Oanh Lisa Nguyen-Xuan with the help of TrussFab’s editor.

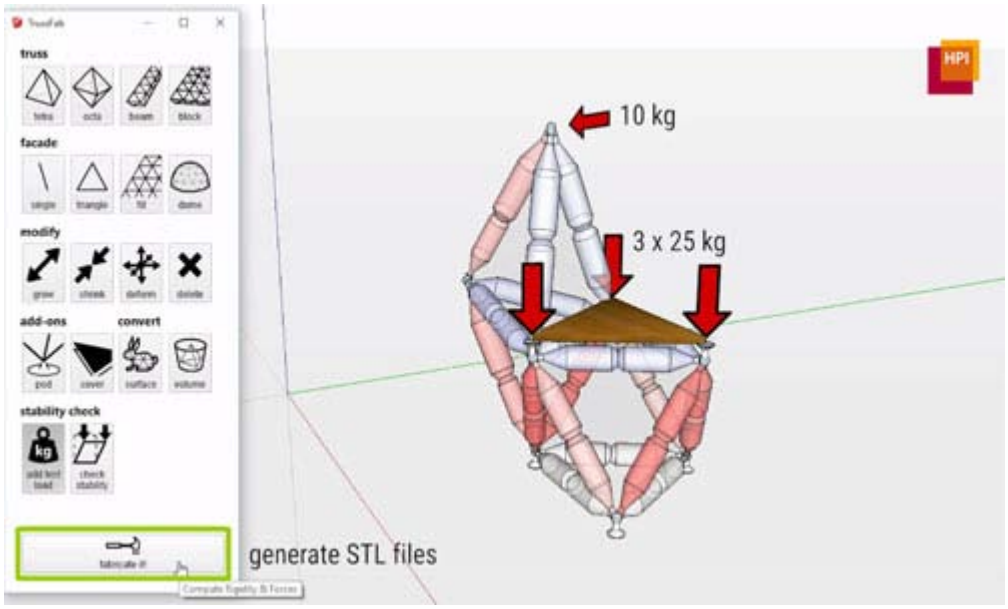
The process of extension self-validate larger structures: At first the effect of weight of any structure placed upon the Structure is computed by TrussFab and they use the software here. The software generally finds the flaws in the truss structure and searches the parts which are not locked properly in place by other members can be subjected to shear or bend forces. In case, if such kind of forces can be found then the software would place additional balancing member; then the software examines the capability of the structure. The software analyzes the applied forces through finite element analysis for every member of the structure and shades every member accordingly.

Digital tools used in TrussFab: SketchUp is the most used tool and far most the best software for designing and planning the models in TrussFab. According to Robert, SketchUp is a vast and available platform for 3D projects that help them to make their project easily in 3D editor. Besides SketchUp, they use some additional tools also like Karamba 3D to estimate the forces inside the structures and OpenSCAD for creating the precise hub geometries for 3D printing.

Use of bottles in structures: TrussFab uses the normal soda pop bottles as a recycled product to make structures of their models which they buy from the local stores of Germany. They used refillable bottles for higher structural stability that provides them strength and make strongest and on the other hand the softer bottles are inflated to get the same strength.

Article Source: blog.sketchup.com

https://youtu.be/aoSzOL9k990



How to Use Tap Measure Tool in SketchUp

Simul Chowdhury: Editor

SketchUp tools are designed to give you the simplest way for designing your model. Tap Measure tool does its task of measuring the design without any hassle. It is as easy as dragging and dropping something. But the tool follows a few guidelines that offer you different ways to use the feature. The content discusses them nicely below.

You can activate the Tape measure tool from the Tool manure or large tool set tool. But the most preferred option is shortcut key T from your keyboard that will you to use the feature. The default option of Tap Measure tool is in a guide mode, but you can change it to the measure mode with CTRL key. This tool will help you measure from one end to multiple points as per your need.

Parallel guide lines:

Sketching parallel guide lines needs a few clicks. Click anywhere in the design along an edge you want to parallel with. SketchUp will understand that you want to create a guide parallel. On moving your mouse, you can see the parallel, dashed line.

Linear guide lines:

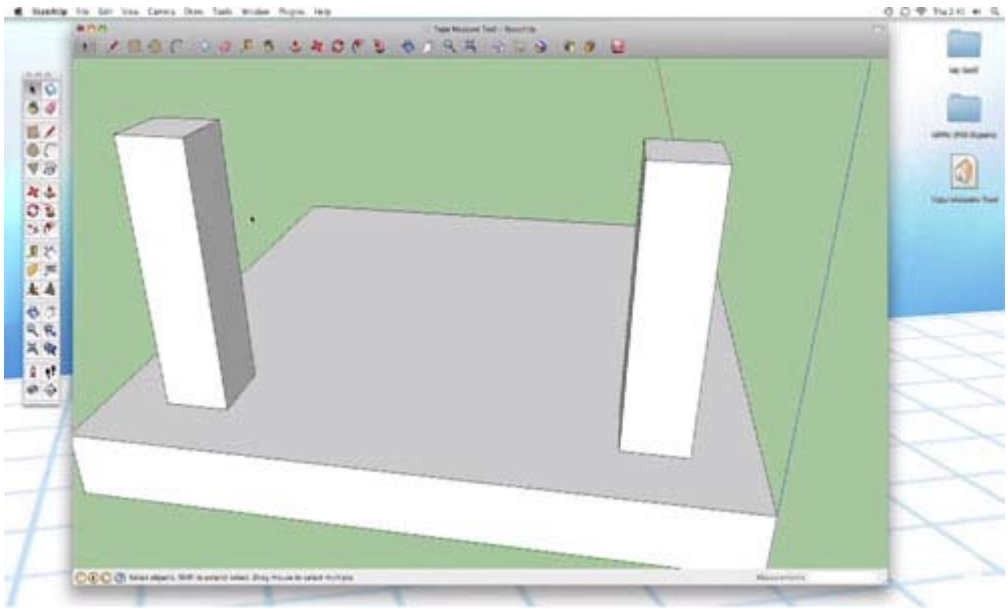
You can simply create a linear guide with clicking an endpoint or a midpoint and click somewhere along the edge. Your linear guide will be generated.

Guide point:

You can create a guide point with clicking an endpoint or midpoint and click again somewhere in space. A little X will appear at the end of the dashed line – this place is your guide points.

I am referring a video that presents Tap Measure tool in details

https://youtu.be/efOE4vpQ79U



Drawing basics on SketchUp – Edges and Faces

Simul Chowdhury: Editor

SketchUp is the easiest 3D software application that allows you to draw models flawlessly. The drawing basics involve a few interesting features and tools that help you understand how to sketch the model correctly. They are as simple as the uncomplicated a designing concept of 2D. Since the edges and faces play the primary roles, you have to understand the application of different tools concentrated on performing the same task. Learning them will keep you a step ahead to design the models without any obstacles. The content discusses lines, faces and inferences.

Drawing a line:

Drawing a line in SketchUp does not take your long time. It follows some simple steps and they are described below.

• Choose the line tool from the tool bar or press L. The cursor transforms into a pencil.
• Click on the starting point of the line on SketchUp.
• A line will follow when you move around the cursor.
• The measurement box displays the length of the line.
• The line you are drawing turns into a specific color (red, green or blue) as per the color of the axis it parallels with.
• Click the end point of your line. Remember, the end point can be a start point of a new line.

Creating a face:

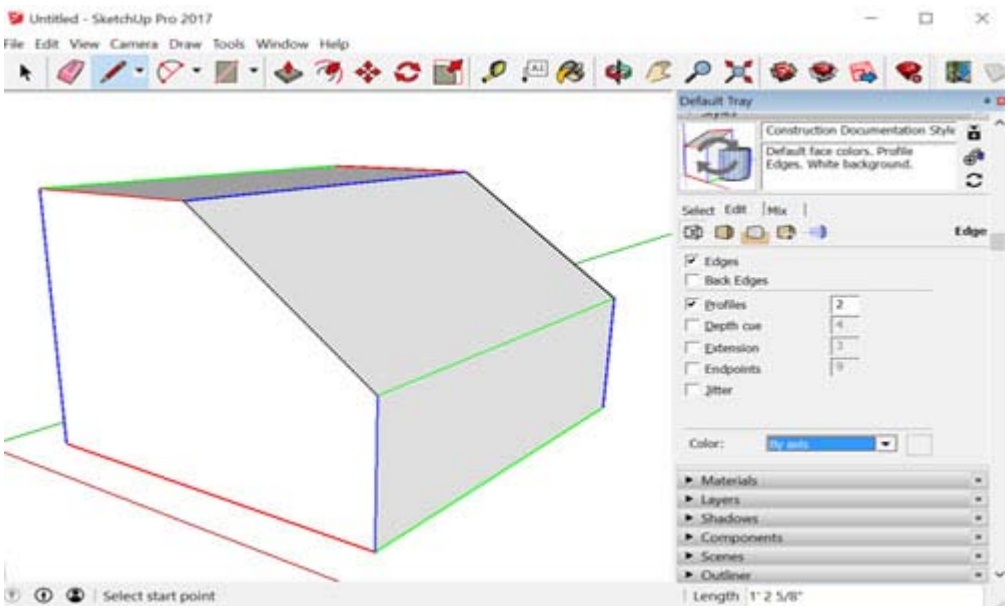
A face on SketchUp creates with the assembling of lines or edges. It is a common kwon fact that faces are plain always. On the application, some faces remain in shading and some are opaque. This very characteristic represents the core design of 3D that distinguishes from the 2D part. Shapes can be rectangular, circle and polygon.

Dividing faces:

Dividing faces of model is as simple as you expect. Draw a line on the model and use the push pool tool to divide the face.

Opening in 3D shapes by erasing edges and faces:

Opening in 3D shapes is a must-know lesson that enhances your knowledge to design even the toughest models. You can use an erase tool to eliminate the lines and edges to create an opening. The steps below will help you.



• Select the erase tool.
• Click the edges that you want to erase.
• To erase a face, context-click on the face and choose the erase tool.

Lines and inferences:

Inferences are an associated tool that tells the cursor position in the line by different color dots and screen tip boxes. Hover your cursor around the model and you witness many inferences with different applications.

The drawing basics on SketchUp are based on the two basic characters of the application – edges and faces. To draw anything on Sketch, these two dominate your complete drawing.

Article Source: blog.sketchup.com

Angular Dimension in SketchUp

Simul Chowdhury: Editor

SketchUp stores the most needed application to design some serious works. SketchUp users often face difficulties in inserting an angle correctly to the design. Angular dimension helps you measure the right angle. This content brings out the easiest way to put an angle with maintaining accuracy. The easy yet effective tool in SketchUp maps everything related to an angle dimension for you. Steve Baumgartner introduced Angular Dimensions for SketchUp users with adding essential aspects needed for adding the right angle to your design. The content deals with tips to add inner and outer angular dimensions to your design. It also discusses a few questions regarding this tool.

Angular dimension:

It is an extension that you need to install first. As the name said, it defines angles of your model. To activate the extension, choose the option angular dimension from the tools menu.

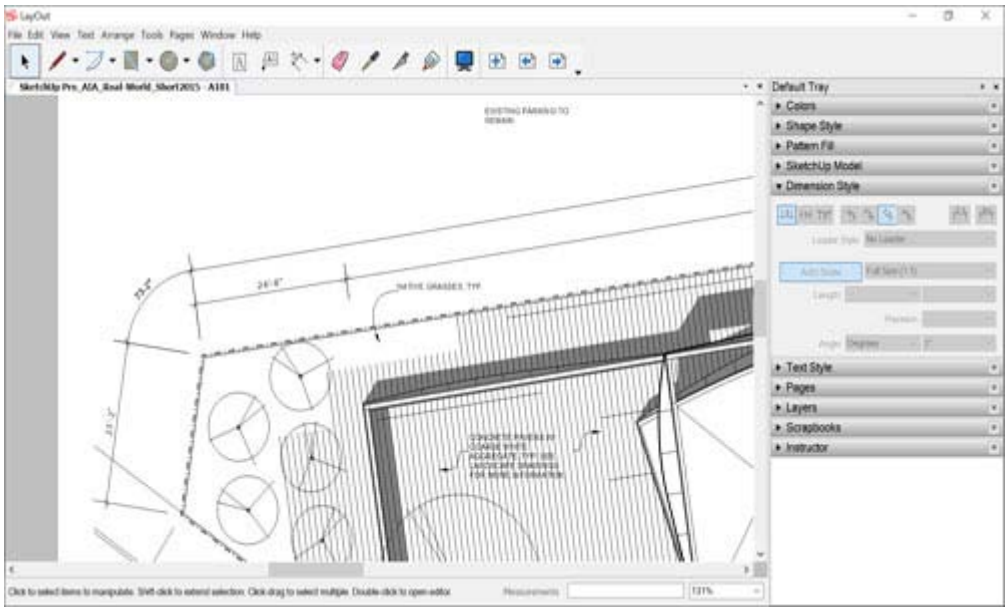
Angular dimension in 3D design comes up with an array of complexities. Steve tried his best to eliminate existing problems and offered an understandable approach that helps you know inner and outer dimensions.

To draw an angle, you need to choose three points in your design – the first end, the end point and the second end. The angular dimension shoes you the angle of your chosen area with a leader text. For toggling between inner and outer dimensions, use TAB button.

Generally queries related to SketchUp Angular dimension tools: Many users complain that SketchUp Angular dimension tool is missing. They must understand that it is not a built-in tool and they have to install the plugin to use. For this, please check https://sketchucation.com/pluginstore?pln=draw_angle_dim

This tool comes under the features of marking dimensions in SketchUp. Whenever you need to mark a distance and angle in your model, linear dimension and angular dimension prove to be very useful.

A guide to create an Angular Dimensions:



It follows a few steps to design an angle. Details are mentioned below:

1. When the tool is in active, click a point that makes an angle. On hovering the cursor over the line, you will find On Line or On Point interference. A dash blue line will appear when you click the point.
2. Click the angle's vertex to create a one-half of the angle. See Callout 1.
3. Click the point that creates the other half of the angle.
4. On moving the cursor to the angle's vertex, a blue dash line will appear. When the line crosses the first line, a hollow point is created that defines angle's vertex. Callout 2.

5. Click the angle vertex to create an angular dimension.
6. Move the cursor from the vertex area to the direction of the angle you measure.
7. Click to measure the angular dimension. Callout 3.

The information above helps you know how to measure angular dimension of your SketchUp design. it needs your creative part of your designing.

Article Source: blog.sketchup.com

About Fred Bartels and his creation

Subhra Bera: Editor

Fred Bartels is an educator, builder, artist, maker and a very old member of the SketchUp community. He became inspired by Seymour Papert and many other education visionaries and hope that the future of SketchUp in the classroom of SketchUp. Bartels has introduced SketchUp to his students Seventeen years ago and from that time he continuously trying to create some variations in the classes of SketchUp from its normal class studies and also Bartels hope that other educators will realize this soon and follow the same.

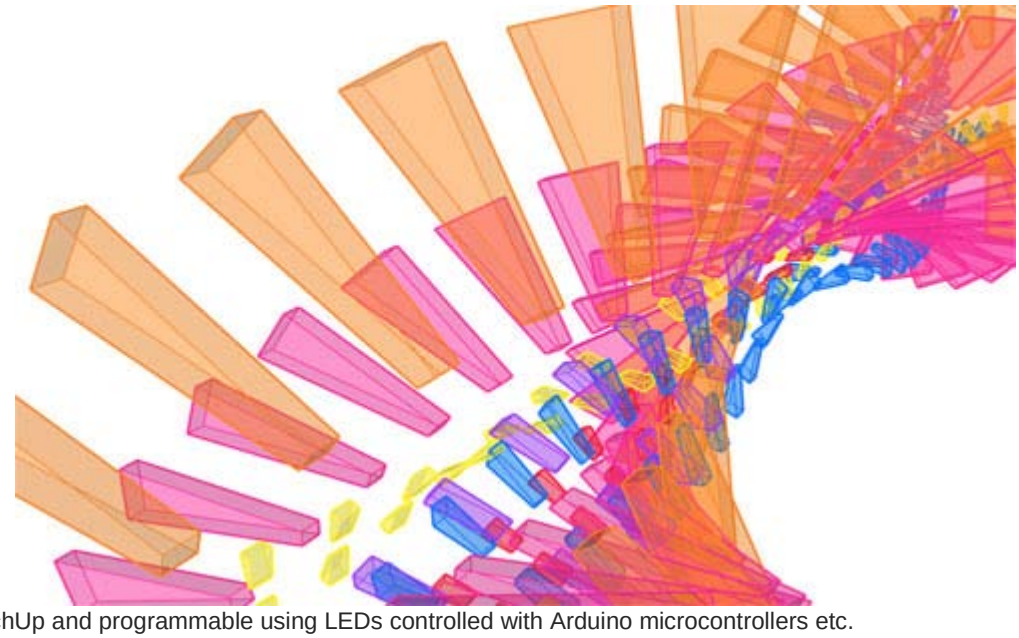
In this article we will go through the idea of Bartels in encouraging students for a better study with some new techniques. As Fred has been with SketchUp for a long time, he can describe his creations better way through SketchUp.

Fred's 3D modeling story: Fred Bartels had a great interest in art and architecture and had done some photography courses in high school but could not pursue it in future as a profession. He generally produced art in a summarized way and loved to work with the house designs and often made outlet for his designed ideas. He started to teach in the computer programming classes when the computer and 3D design tools became available in most of the schools and taught about many programs and software. But all were not much good for the students still he found SketchUp at MacWorld 2002 and loved it. From then he has been providing lessons and IT supports to the students of K-12 schools.

Special things about SketchUp: According to Fred, SketchUp is a vast and most useful tool even in schools as it has various option that help the students to stay focused more on the designs and knowledge not using the tool only. Besides this, Fred tried to do much more things than only designing in computer graphics, SKetchUp can be used in math, science, history and language classes for better understanding. Students loved the idea and some of them tried to make some innovative work; such as Andrew Nathanson who had made a unique design work and had been invited to the SketchUp Basecamp 2008. There he got a chance to represent his design and also shared the method of using SketchUp in K-12 environment in schools.

The relationship between technology and education progress: According to Fred, he and other educators have a wish that computers will provides a rich ranged world for the students where they could both play and experiment over things and can get loads of information. It will be done in a way that would give them abbreviate concept and keep them interested and focused.

A great supporter of this idea was MIT's Seymour Papert; he had thinking that computers can be used in education as in books like Mindstorms: Children, Computers, And Powerful Ideas and The Children's Machine: Rethinking School in the Age of the Computer Reprint Edition. SketchUp is just like that and with the 3D Warehouse students could get an available way for sharing their designs and get feedbacks on them. In schools or educational institutions, computer is generally used as an information presentation tool for providing only some information; though it is not enough as there are more things than normal information. It is good news that there are some new software like Maker Movement, Sketchup etc. that are providing various additional roles in teaching and learning.



Fred's new models for students: Fred has a keen interest in art and architecture and has examined many building and design ideas, shared them in 3D Warehouse. After quitting his teaching he took a number of courses at Yestermorrow; which is a design or build school in Vermont and became capable to do some more creative works. He got appreciation for his works that he had shared in 3D Warehouse or SketchUcation that motivated him to do more experiments. Later he worked over 3D printing and made some small sculptures designed in SketchUp and programmable using LEDs controlled with Arduino microcontrollers etc.

Besides SketchUp, he also shared his designs in another site named Thingiverse and has some other ideas about making larger designs for future, SketchUp's role in designs of Fred: After discovering SketchUp, Fred found to work with his ideas and designs in a vast and better platform that also provide him to explore the designs and make creative works on them. SketchUp has now become a part of his work as it is ever growing software that provides new things every time.

Other extensions: He used the extension named Artisan for any kind of work and in addition with that Profile Builder, Solid Inspector 2, Align 2 and Export STL.

Fred is happy with SketchUp and has been using for the past 15 years and expect to explore more sides of his designing skill and also hope that SketchUp will play more active role in education system and will provide a great supportive, powerful and unique microworld to develop and explore 3D design ideas.

Article Source: blog.sketchup.com

Christmas story in SketchUp

Subhra Bera: Editor

SketchUp is one of the most used software for 3D modeling and design tools across the world and SketchUp team works with a motto that is “SketchUp for everyone”. From their beginning they are continuously working to provide their users better and smarter experience in work than previous. With SketchUp and they have published so many tools that will be useful for designing and modeling.

As a result of their constant improvement now-a-days it has been using by hundreds of thousands of architects, engineers, contractors, woodworkers, artists and other people from various fields. The team is also working on SketchUp Pro, LayOut, Extension Warehouse and the 3D Warehouse for designing each and every little object from motion centers to treehouses and many more.

Christmas is one its way and celebrated by most of the people in world with cheerfulness that become a huge celebration all over the world. In the outer countries especially the winter countries have lots of plans for this grand day and the festive mood starts from the beginning of December and SketchUp’s offices are not behind from that celebration. TY Schalamon has created some wonderful LED-star lights for decorating Christmas trees and made the print out and designs of the LED star lights with the help of SketchUp.

TY Schalamon is a user of SketchUp and works as a member of the Knowledge Team who provide Technical Support for SketchUp. In his team he has to work on fixing problems of the users and try to improve the support system to provide better help to the users. This article is a brief of the work of Ty for the Christmas.

Ty thought to make some variations in Christmas tree this year and he started to draw his idea in Sketchup that resulted print out of a LED-lit star for the Christmas tree this year and discussed about that. He also uploaded those models of LED-lit star in the 3D Warehouse so that anyone can use them for decorating his/her Christmas tree.

The unique part of the printing is that the models should be printed at 0% filling and they don’t need any kind of support. Ty also made snowflakes in SketchUp and for them he used a SketchUp pattern component method and kept the sides of all the snowflakes same. On the base shape he used a dodecahedron and then raised the edges up to a fixed point for every star point.

Dodecahedron is term used in geometry which is like any polyhedron that has twelve flat faces, also has three meeting at each height and represented by the Schläfli symbol.

After fixing the edges of the stars he used Fredo6’s Joint Push Pull tool for fixing the thickness to a perfect size that should enough thin to not filling while printing but should be enough thick to be strong. After that he added a certain fit sized hole in the bottom of the LEDs and send through STL export into the slicer software to print.

Article Source: blog.sketchup.com

Using Tape Measure Tool in SketchUp

Subhra Bera: Editor

The Tape Measure Tool in SketchUp is used in SketchUp to scale or measure between the points and also it is useful to create construction lines. This construction lines are work as referral geometry in SketchUp. Users can also re-size any group or the whole model by using this Tape Measure Tool. In SketchUp, along with Tape Measure Tool, the Protractor tool and the Measurements box are allowed to model accurately different things, those are:

a. Tape Measure Tool is used to scale a distance and fix exact guide lines or points.
b. The Protocol Tool can use to scale angles and fix an exact angled guide line.
c. The Measurements box waits to accept an exact value after using any kind of tool.

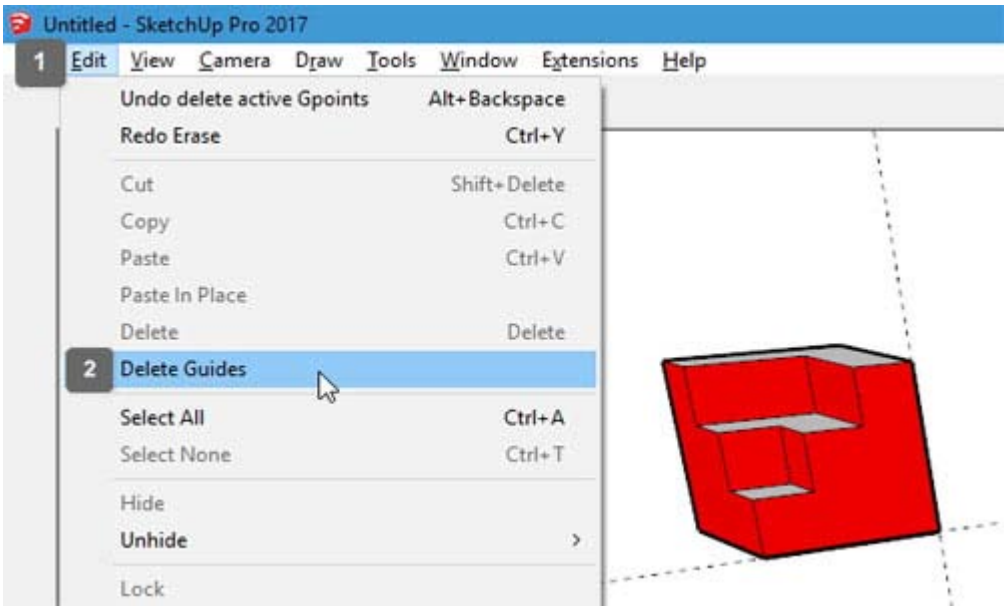
Under the Tape Measure Tool the things can find are:

a. Getting Started Toolbar
b. Construction Toolbar
c. Large Tool Set Toolbar
d. Tools menu on the menu bar
e. Tools palette

This article will describe all the way to use Tape Measure tool, its speed and working areas and how easily it can make a perfect modeling.

1. Getting started with the Tape Measure tool: The Tape Measure Tool is found in the Tools menu of SketchUp or can get through some toolbars such as Getting Started, Construction or large Toolset Toolbar. Without all this there is the simple way to start the Tape Measure Tool by using the shortcut key T. After entering the tool the cursor automatically get the shape of a Tape Measure icon which has 2 measuring modes. The Guide Create mode will automatically activated after launching the tool and can be seen by the cursor's figure. Users can also switch between Guide Create and Measure mode by using the CTRL key.

2. Using Measure Mode in SketchUp: This method is useful in accounting the measurements from a point to various points, ESC key is used to create new measuring point. This mode scales the whole model and using SketchUp's Inference engine with arrow keys can change the measuring direction. Measure Mode can resize the whole model and a single object also. To resize them a group or component has to edit at first and then using the Tape Measure tool in Measure mode can resize the edited object.



3. Using Guide Create mode in SketchUp: This mode in the Tape Measure Tool is used to plan guide lines and points in SketchUp to firm draw in the workspace and various methods can apply for guiding drawings where the drawing can be done. Such as, A) infinite Guide Lines; it generally creates for gliding on an edge in SketchUp and can be created with double click. The distance between the lines can be measured only by entering a value against it. These lines can be arranged using array commands and create by placing a guide at the minimum distance and using the Move tool for copying the guide. B) Guide points; Guide lines can be ended with a construction point, at first an endpoint is picked after that measured direction and length will pick up. The endpoint is like the forcing tool into guide point mode that can create guide point at anywhere. Updated SketchUp's inference engine knows every points to infer and combining with the Tape Measure Tool with it users can create all kind of guide lines and points in a moment.

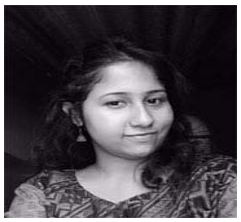
4. Deleting guide lines in SketchUp: The Select tool or the Erase tool help to remove the guide lines and points and areas.

5. Managing and deleting guide lines in SketchUp using Extensions: Using any kind of extension can make the way of managing and deleting guide lines simple and TIG's Construction Line Delete via Context extension is available. It is useful as it can expand SketchUp with added more options by a right click on an existing Guide line. But this extension need to install in SketchUp and can found in the SketchUp's ExtensuionStore. To install it got to the Search feature and type guide, the extension will appear with an install option just click on it and it will be installed. Installing and using this extension can give users access to more delete and layer management options to Guide lines and points through a context menu. There are more options find here to manage the guide lines and points.

Article Source: sketchucation.com

Magazine Details – The Creative team of Sketchup-ur-Space

Started in September 2010, Sketchup ur Space (SuS) was the first online magazine devoted to SketchUp, that unique, innovative 3D design tool from Google. It holistically covers features, events, news, updates, reviews and many tips and tricks.



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